

No: 7/90 **Ref:** EW/G90/05/02 **Category:** 1c

Aircraft Type and Registration: Reims Cessna F150M, G-BDZC

No & Type of Engines: 1 Continental O-200-A piston engine

Year of Manufacture: 1976

Date and Time (UTC): 3 May 1990 at 1320 hrs

Location: Blackbushe Airport, Hampshire

Type of Flight: Private

Persons on Board: Crew - 1 Passengers - None

Injuries: Crew - Minor Passengers - N/A

Nature of Damage: Substantial damage that was beyond economic repair

Commander's Licence: Private Pilot's Licence

Commander's Age: 65 years

Commander's Total Flying Experience: 110 hours (all on type)

Information Source: Aircraft Accident Report Form submitted by the pilot and AAIB field examination

The aircraft had been flown on a cross country navigation flight from Blackbushe Airport, the route having included turning points over Arundel, Petersfield and Alton. The pilot reports that prior to boarding the aircraft, a flying instructor had warned him that the engine was running rich, and explained how to set the mixture control for optimum adjustment. From this explanation he understood that this could be done during the pre-take off run up, or it could be done in the cruise. In the event he reports that he did the adjustment during the run up and that the mixture control was left approximately 1.25 inches out from the fully rich position.

On the take off run the engine appeared to develop full power immediately and the aircraft achieved flying speed in the expected distance. The cross country flight was uneventful in fine, sunny and warm weather. There were no indications of icing, however, as a precaution, the carburettor heat was applied on four or five occasions. The pilot also regularly checked the adjustment and position of the mixture control and found it to remain in the optimum position as originally set.

On the final sector of the cross country flight (between Alton and Blackbushe) the pilot reports that he realised that he was running late of his planned return time, and was anxious to make up time. He joined the Blackbushe circuit at 2000 feet on the dead side for runway 08 and descended towards the

1000 feet circuit height. He did in fact descend lower than 1000 feet (down to about 800-850 feet) and applied full power to regain circuit height. He states that this unsettled him and, combined with his desire to save time, resulted in hurried down wind checks. He attempted to fly a "tight circuit" and, on turning onto base leg, lowered 20 degrees of flap and reduced power. The aircraft did not appear to be descending sufficiently quickly and he reduced the power to idle. As he was turning onto the final approach, and when he considered the height to be correct for the distance to run to the threshold, he increased the power selection, but obtained no immediate response from the engine. He then moved the power lever in and out several times but without engine response.

The pilot's report continues that he then realised that, without power, he was not going to reach the runway threshold and, seeing no alternative, increased the rate of turn in order to try and cut the corner and reach the closest open space on the Airport. At the same time he raised the flaps in an attempt to reduce the rate of descent and flatten the glide. This was unfortunately of no avail and the aircraft touched down in a steep nose up attitude, stall warning sounding, close to the eastern end of an empty car park. It then bounced into a metal and wire dividing fence which considerably reduced its forward speed until it came to rest, in a nose down attitude with the nose landing gear collapsed, amongst a line of cars in the adjacent car park. The pilot, who was dazed and confused by the impact, had some difficulty in releasing his safety harness and vacating the aircraft. He then returned to switch off the master and ignition switches and turn off the fuel. The Airport emergency services arrived within minutes and doused the surrounds in foam. There was no fire.

When the aircraft was first examined after the accident all electrical switches were found to be 'OFF', the fuel selector was 'OFF', and the mixture control was selected to fully rich. The carburettor heat selector was partially out. When the engine cowlings were removed it was apparent that, although some of the engine bearing structure was damaged, the engine itself was intact with all its controls still connected. The spark plugs were removed and found to look normal. The engine was later started without difficulty and, although due to the degree of damage sustained by the propeller and engine mountings a full power check was not deemed advisable, it appeared to run normally at low power.